INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live.

Joseph E. Kernan
Governor

Lori F. Kaplan
Commissioner

100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.in.gov/idem

January 30, 2004

TO: Interested Parties / Applicant

RE: Johnson Controls, Inc. / MSOP 039-17604-00018

FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

(1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
(2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
(3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

(1) the name and address of the person making the request;
(2) the interest of the person making the request;
(3) identification of any persons represented by the person making the request;
(4) the reasons, with particularity, for the request;
(5) the issues, with particularity, proposed for considerations at any hearing; and
(6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures
FNPER.dot 9/16/03

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live.

Governor

Lori F. Kaplan
Commissioner

100 North Senate Avenue
P. O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

MINOR SOURCE OPERATING PERMIT
OFFICE OF AIR QUALITY

Johnson Controls, Inc.
1302 East Monroe Street
Goshen, Indiana 46528

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: MSOP 039-17604-00018	
Issued by: Original signed by Paul Dubenetsky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date:January 30, 2004 Expiration Date:January 30, 2009

TABLE OF CONTENTS

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates stationary measuring and controlling devices manufacturing plant that produces thermostats, valves etc.

Authorized Individual:	Plant Manager
Source Address:	1302 East Monroe Street, Goshen IN 46528
Mailing Address:	1302 East Monroe Street, Goshen IN 46528
General Source Phone Number:	(219) 538-6154
SIC Code:	3822
County Location:	Elkhart
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Minor Source Operating permit Minor Source, under PSD Minor Source, Section 112 of CAA

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

(a) Two (2) Nissei plastic parts molding presses operating in a total enclosure, cumulatively identified as Unit #1, installed in 1994, with each press rated at a maximum throughput of 12.0 pounds of phenolic molding compound per hour.

(b) Nine (9) auto mold plastic parts molding presses cumulatively identified as Unit #2, all installed between 1959 and 1980, consisting of three (3) 75-ton presses each with a maximum throughput of 8.2 pounds of phenolic molding compound per hour and six (6) 25-ton presses each with a maximum capacity of 1.9 pounds of phenolic molding compound per hour, all exhausting to one (1) baghouse for particulate matter (PM) emissions control, with the baghouse exhausting at one (1) stack identified as S2.

(c) Two (2) natural gas fired boilers identified as Boiler 1 (Unit 9) and Boiler 2 (Unit 10) and individually rated at 11.7 (MMBtu) heat input per hour, with each boiler exhausting to one (1) stack respectively identified as S7 and S8. Boilers 1 and 2 were constructed in 1969 and 1977 respectively.

(d) Groundwater remediation system installed in 1999 including:

(1) Six (6) low-level air strippers, each rated at 200 gallons per hour and each equipped with an air blower operating at a maximum of 1400 actual cubic feet per minute, with emissions being exhausted to six stacks designated AS1 through AS6; and

(2) One (1) flow distribution water tank, with pumps and associated equipment.

(e) Grinding Room rated at 12.5 pounds of plastic parts per hour and containing twenty-three (23) screw grinding machines, with a cartridge filter for particulate matter (PM) emissions control for the room.

(f) One (1) Wheelabrator-Frye Tumblast plastic parts deflashing machine identified as Unit #5, installed in 1978, rated at 400 pounds of plastic parts per hour, with one(1) baghouse for particulate matter (PM) emissions control, exhausting at one (1) stack identified as S5.

(g) One (1) spray can paint booth for touch-up of metal and maintenance of metal and plastic parts utilizing an average of one (1) 12-ounce spray can per week, and equipped with dry filter particulate matter overspray control.

(h) One (1) baking soda blaster, rated at 5 pounds of plastic parts and baking soda per hour, with a cartridge filter for particulate matter (PM) emission control.

(i) Additional miscellaneous activities, including:

(1) Two (2) hot water heaters rated at 0.65 MMBTU/hr.

(2) One (1) Clean-O-Mat aqueous washer.

(3) Two (2) Bowden aqueous washers.

(4) One (1) electric curing oven for plastic parts.

(5) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.

SECTION B GENERAL CONDITIONS

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

B.1 Permit No Defense [IC 13]

This permit to operate does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

B.2 Definitions

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations IC 13-11, 326 IAC 1-2, and 326 IAC 2-1.1-1 shall prevail.

B.3 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

B.4 Permit Term and Renewal [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5]

This permit is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions of this permit do not affect the expiration date.

The Permittee shall apply for an operation permit renewal at least ninety (90) days prior to the expiration date. If a timely and sufficient permit application for a renewal has been made, this permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.

B.5 Modification to Permit [326 IAC 2]

All requirements and conditions of this operating permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

B.6 Annual Notification [326 IAC 2-6.1-5(a)(5)]

(a) Annual notification shall be submitted to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.

(b) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.

(c) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in the format attached no later than March 1 of each year to:

Compliance Branch, Office of Air Quality
Indiana Department of Environmental Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, IN 46206-6015

(d) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

B.7 Preventive Maintenance Plan [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs) including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

(b) The Permittee shall implement the PMPs, including any required record keeping, as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit.

(c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMP does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation, Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.8 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

(a) Permit revisions are governed by the requirements of 326 IAC 2-6.1-6.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application shall be certified by an "authorized individual" as defined by 326 IAC 2-1.1-1.

(c) The Permittee shall notify the OAQ within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

(d) No permit amendment or modification is required for the addition, operation or removal of a nonroad engine, as defined in 40 CFR 89.2.

B.9 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)][IC 13-14-2-2] [IC 13-30-3-1]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under this title or the conditions of this permit or any operating permit revisions;

(c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect, at reasonable times, any processes, emissions units (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit or any operating permit revisions;

(d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.10 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]

Pursuant to [326 IAC 2-6.1-6(d)(3)] :

(a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAQ, Permits Branch, within thirty (30) days of the change.

(b) The written notification shall be sufficient to transfer the permit to the new owner by an notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).

(c) IDEM, OAQ, shall issue a revised permit.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

B.11 Annual Fee Payment [326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing.

(b) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, I/M & Billing Section), to determine the appropriate permit fee.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds Per Hour [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

C.2 Permit Revocation [326 IAC 2-1.1-9]

Pursuant to 326 IAC 2-1.1-9 (Revocation of Permits), this permit to operate may be revoked for any of the following causes:

(a) Violation of any conditions of this permit.

(b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.

(c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.

(d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.

(e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

C.3 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.4 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

C.5 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted by using ambient air quality modeling pursuant to 326 IAC 1-7-4.

C.6 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by an “authorized individual” as defined by 326 IAC 2-7-1(34).

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Demolition and renovation
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).

(g) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

Testing Requirements

C.7 Performance Testing [326 IAC 3-6]

(a) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date.

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14 days) prior to the actual date.

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.8 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U.S. EPA.

Compliance Monitoring Requirements

C.9 Compliance Monitoring [326 IAC 2-1.1-11]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

C.10 Compliance Response Plan - Preparation and Implementation

(a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit.A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:

(1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.

(2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan, the Permittee shall amend its Compliance Response Plan to include such response steps taken.

(b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:

(1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or

(2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.

(3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, and it will be 10 days or more until the unit or device will be shut down, then the permittee shall promptly notify the IDEM, OAQ of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.

(4) Failure to take reasonable response steps shall be considered a deviation from the permit.

(c) The Permittee is not required to take any further response steps for any of the following reasons:

(1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for a minor permit modification to the permit, and such request has not been denied.

(3) An automatic measurement was taken when the process was not operating.

(4) The process has already returned or is returning to operating within "normal"

parameters and no response steps are required.

(d) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

C.11 Actions Related to Noncompliance Demonstrated by a Stack Test

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected emissions unit while the response actions are being implemented.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.

(a) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do not require the certification by an “authorized individual” as defined by 326 IAC 2-1.1-1.

Record Keeping and Reporting Requirements

C.12 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

(a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.

(b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.

(c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).

(d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.13 Emission Statement [326 IAC 2-6]

(a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:

(1) Indicate estimated actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);

(2) Indicate estimated actual emissions of regulated pollutants (as defined by 326 IAC 2-7-1(32) "Regulated pollutant which is used only for purposes of Section 19 of this rule") from the source, for purposes of Part 70 fee assessment.

(b) The annual emission statement covers the twelve (12) consecutive month time period starting December 1 and ending November 30. The annual emission statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

C.14 General Record Keeping Requirements [326 IAC 2-6.1-5]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented when operation begins.

C.15 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

(a) Reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(c) Unless otherwise specified in this permit, any quarterly report required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The reports do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(d) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description:

Nine (9) auto mold plastic parts molding presses cumulatively identified as Unit 2, consisting of three (3) 75-ton presses each with a maximum throughput of 8.2 pounds of phenolic molding compound per hour and six (6) 25-ton presses each with a maximum capacity of 1.9 pounds of phenolic molding compound per hour, all exhausting to one (1) baghouse for particulate matter (PM) emissions control, with the baghouse exhausting at one(1) stack identified as S2.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.1.1 Particulate [326 IAC 6-3-2(e)]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from each of the nine (9) auto mold plastic parts molding presses, shall not exceed 0.551 pounds per hour when operating at a process weight less than 100 pounds per hour. The pounds per hour limitation was calculated using the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.1.2 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Determination Requirements

D.1.3 Particulate Control

Pursuant to CP-039-7201-00018, issued on January 19, 1999 and in order to comply with D.1.1, the baghouse for particulate control shall be in operation and control emissions from the nine (9) auto mold plastic parts molding presses (cumulatively identified as Unit 2) at all times that nine (9) auto mold plastic parts molding presses are in operation.

Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.4 Visible Emissions Notations

(a) Visible emission notations of the Unit 2 (comprising of nine (9) auto mold plastic parts molding presses) baghouse stack exhaust shall be performed weekly during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.1.5 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with nine (9) auto mold plastic parts molding presses (cumulatively identified as Unit 2), at least once per shift when Unit 2 is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 0.5 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.1.6 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling nine (9) auto mold presses operations when venting to the atmosphere. Inspections are optional when venting to the indoors. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.

D.1.7 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation and Implementation, shall be considered a violation of this permit. If operations continue after bag failure is observed and it will be 10 days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

(b) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.8 Record Keeping Requirements

(a) To document compliance with Condition D.1.4, the Permittee shall maintain records of visible emission notations of the Unit 2 stack exhaust weekly.

(b) To document compliance with Condition D.1.5, the Permittee shall maintain records once per shift of the total static pressure drop during normal operation when venting to the atmosphere.

(c) To document compliance with Condition D.16, the Permittee shall maintain records of the results of the inspections required under Condition D.1.6 and the dates the vents are redirected.

(d) To document compliance with Condition D.1.2, the Permittee shall maintain of records of any additional inspections prescribed by the Preventive Maintenance Plan.

(e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description

(a) Two (2) natural gas fired boilers identified as Boiler 1 (Unit 9) and Boiler 2 (Unit 10) and individually rated at 11.7 MMBtu heat input per hour, with each boiler exhausting to one (1) stack respectively identified as S7 and S8. Boilers 1 and 2 were respectively constructed in 1969 and 1977.

(b) One (1) Wheelabrator-Frye Tumblast plastic parts deflashing machine identified as Unit #5, installed in 1978, rated at 400 pounds of plastic parts per hour, with one(1) baghouse for particulate matter (PM) emissions control, exhausting at one (1) stack identified as S5.

(c) One (1) spray can paint booth for touch-up of metal and maintenance of metal and plastic parts utilizing an average of one (1) 12-ounce spray can per week, and equipped with dry filter particulate matter overspray control.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.2.1 Particulate [326 IAC 6-2-3]

Pursuant to 326 IAC 6-2-3 (Particulate Limitations for Sources of Indirect Heating) the PM emissions from Boiler 1 (Unit # 9) and Boiler 2 (Unit # 10) each with 11.7 MMBtu per hour heat input boiler shall be limited to 0.8 and 0.6 pounds per MMBtu heat input respectively.

This limitation is based on the following equation:

$$Pt = \frac{C \times a \times h}{76.5 \times Q^{0.75} \times N^{0.25}}$$

where

C = 50 u/m^3
Pt = emission rate limit (lbs/MMBtu)
Q = total source heat input capacity (MMBtu/hr)
N = number of stacks
a = plume rise factor (0.67)
h = stack height (ft)

D.2.2 Particulate [326 IAC 6-3-2(e)]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the Wheelabrator-Frye Tumblast plastic parts deflashing machine shall not exceed 1.39 pounds per hour when operating at a process weight rate of 400 pounds per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.2.3 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]

Any modification or change which may increase actual VOC usage at the spray can paint booth to greater than 15 pounds per day before any add-on controls, shall require OAQ's prior approval before such change can take place.

D.2.4 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Record Keeping and Reporting Requirement [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.2.5 Record Keeping Requirements

To document compliance with Condition D.2.3, the Permittee shall maintain records of monthly VOC usage at the paint booth.

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description:
Remediation equipment consisting of:

Groundwater remediation system installed in 1999 including:

(1) Six (6) low-level air strippers, each rated at 200 gallons per hour and each equipped with an air blower operating at a maximum of 1400 actual cubic feet per minute, with emissions being exhausted to six stacks designated AS1 through AS6; and

(2) One (1) flow distribution water tank, with pumps and associated equipment.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.3.1 Volatile Organic Compounds (VOCs) [326 IAC 8-1-6]

Any change or modification which may increase potential VOC emissions to twenty-five (25) tons per year from the six (6) low-level air strippers shall require prior approval from the Office of Air Quality (OAQ) before such change can occur. Therefore, the best available control technology (BACT) requirement in 326 IAC 8-1-6 (New Facilities: General Reduction Requirements) does not apply.

D.3.2 Hazardous Air Pollutants (HAPs) [326 IAC 2-4.1]

Any change or modification which may increase potential single HAP emissions to ten (10) tons per year, or total combined HAP emissions to twenty-five (25) tons per year, from the six (6) low-level air strippers shall require prior approval from the Office of Air Quality (OAQ) before such change can occur. Therefore, the maximum achievable control technology (MACT) requirement in 326 IAC 2-4.1-1 (New Source Toxics Control) will not apply.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH

MINOR SOURCE OPERATING PERMIT
ANNUAL NOTIFICATION

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

Company Name:	**Johnson Controls, Inc.**
Address:	**1302 East Monroe Street**
City:	**Goshen, Indiana 46528**
Phone #:	**(219) 538-6154**
MSOP #:	**MSOP 039-17604-00018**

I hereby certify that **[source]** is **?** still in operation.
? no longer in operation.

I hereby certify that **[source]** is **?** in compliance with the requirements of MSOP 039-17604-00018.
? not in compliance with the requirements of MSOP 039-17604-00018.

Authorized Individual (typed):
Title:
Signature:
Date:

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

Noncompliance:

MALFUNCTION REPORT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

FAX NUMBER - 317 233-5967

This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ?_____, 25 TONS/YEAR SULFUR DIOXIDE ?_____, 25 TONS/YEAR NITROGEN OXIDES?_____, 25 TONS/YEAR VOC ?_____, 25 TONS/YEAR HYDROGEN SULFIDE ?_____, 25 TONS/YEAR TOTAL REDUCED SULFUR ?_____, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ?_____, 25 TONS/YEAR FLUORIDES ?_____, 100TONS/YEAR CARBON MONOXIDE ?_____, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ?_____, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ?_____, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ?_____, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ?_____. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION _____.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC _____ OR, PERMIT CONDITION # _____ AND/OR PERMIT LIMIT OF _____

THIS INCIDENT MEETS THE DEFINITION OF 'MALFUNCTION' AS LISTED ON REVERSE SIDE ? Y N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ? Y N

COMPANY:_____PHONE NO. ( )_____
LOCATION: (CITY AND COUNTY)_____
PERMIT NO. _____ AFS PLANT ID: _____ AFS POINT ID: _____ INSP:_____
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON:_____
_____

DATE/TIME MALFUNCTION STARTED: _____/_____/ 19____ _____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION:
_____

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE_____/_____/ 19____ _____ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO2, VOC, OTHER:_____

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____

_____

MEASURES TAKEN TO MINIMIZE EMISSIONS:_____

_____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES:_____
CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS:_____
CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT:_____
INTERIM CONTROL MEASURES: (IF APPLICABLE)_____
_____
_____

MALFUNCTION REPORTED BY:_____TITLE:_____

(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY:_____DATE:_____TIME:_____

*SEE PAGE 2

Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

***Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

_____

_____

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the
Technical Support Document for a Minor Source Operating Permit (MSOP)

Source Name:	Johnson Controls, Inc.
Source Location:	1302 East Monroe Street, Goshen, Indiana 46528
County:	Elkhart
SIC Code:	3822
Operation Permit No.:	MSOP 039-17604-00018
Permit Reviewer:	Femi Ogunsola/EVP

On November 24, 2003, the Office of Air Quality (OAQ) had a notice published in The Goshen News, Goshen, Indiana 4652, stating that Johnson Controls, Inc. had applied for a Minor Source Operating Permit (MSOP) to construct and operate a source that manufactures controls for heating, refrigeration, air conditioning and pump devices. The notice also stated that OAQ proposed to issue an MSOP for this operation and provided information on how the public could review the proposed MSOP and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this MSOP should be issued as proposed.

On December 12, 2003, Johnson Controls, Inc., submitted comments to OAQ on the proposed permit. In addition, on December 19, 2003, the Northern Regional Office, IDEM , South Bend , Indiana also submitted comments. A summary of the comments and responses is listed below:

Comment #1

Source List - Since submission of the renewal application several changes have been taken place. First, we have permanently discontinued use of the soil vapor extraction system (Permit Item A.2 (d)(2)). IDEM has concurred that the system is no longer necessary. Second, the gas refrigerant charge area (A.2 (i)(6)) and liquid refrigerant charge areas A and B (A.2(i)(7)) have all been permanently removed.

Response #1

Section A.2 (d) (2) has been revised before the Public Notice. Soil vapor extraction system has been removed based on pre-public notice comments received from the source. Also, the gas refrigerant charge area in section A.2 (i) (6) and the liquid refrigerant charge areas A and B listed in section A.2 (i)(7) were removed following pre-public notice comment requesting their removal by the source. Therefore, there is no revisions or corrections to be made based on this Comment #1.

Comment #2

Visible Emission Notations - Condition D.1.4(a) - We request that the permit condition be changed to incorporate weekly V.E. notations. It appears that there may be some confusion regarding the source. The injection molders do not combust fuel oil as indicated in the permit condition. Our current Part 70 requires V.E. notations weekly. The MSOP requires V.E. notations once per shift. Since our current notation system has not detected any failures and daily pressure drop readings will detect a bag failure, we feel that weekly V.E. notation provides an adequate level of protection. The baghouse inspections discussed in item 4 below will also provide an added measure of protection.

Response #2

IDEM, OAQ has agrees to change the Condition D.1.4(a) to incorporate weekly Visible Emission Notations since there are no significant particulate matter emissions from the operations of the injection molders. Therefore, the phrase "once per shift" has been replaced by "weekly". However, the phrase "while combusting fuel oil" has been removed from Condition D.1.4(a) as indicated below:

D.1.4 Visible Emissions Notations

(a) Visible emission notations of the Unit 2 (comprising of nine (9) auto mold plastic parts molding presses) baghouse stack exhaust shall be performed ~~once per shift~~ **weekly** during normal daylight operations ~~while combusting fuel oil~~. A trained employee shall record whether emissions are normal or abnormal.

Comment #3

Parametric Monitoring-Condition D.1.5 - We propose that our allowable pressure drop range be changed to 0.5 to 6.0 inches water. Our existing Part 70 permit includes a range of 2 - 6inches and the proposed MSOP includes an even tighter range 3 -6 inches. After a filter change and until the filter media coated, it is common for a baghouse to operate properly at a pressure drop of less than 1.0 inch water.

Response #3

The Parametric Monitoring, Condition D.1.5 has been revised as requested by the Permittee during the pre-public notice review.

Comment #4

Baghouse Inspection -Condition D.1.6. We do not understand your mention of redirecting vents to the atmosphere and we propose that the frequency of baghouse inspection be changed to annual. The baghouse currently discharges to the atmosphere and we have no plans to change the stack configuration. Also, our Part 70 permit does not contain an inspection condition. Since we are monitoring pressure drop and visible emissions, the baghouse is used only intermittently and typical bag life under our operating conditions is several years, we feel an annual internal inspection of the baghouse will provide adequate protection.

Response #4

Sometimes facilities have the capability of venting the emissions from their baghouse either inside the plant or outside to the atmosphere. This condition would require a baghouse inspection whenever the facility would switch the baghouse emissions from venting inside the plant to venting outside to the atmosphere. Since Johnson Controls, Inc. does vent outside the statement about redirecting vents to atmosphere will be restructured to avoid any confusion. However, the frequency of the baghouse inspection will not be changed. OAQ believes that the required baghouse inspection frequency is necessary to evaluate continuous compliance particularly with Condition D.1.7 (Broken or Failed Bag Detection). Therefore, baghouse inspection frequency will remain quarterly.

Condition D.1.6 has been revised as follows:

D.1.6 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling nine (9) auto mold presses operations when venting to the atmosphere. ~~A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter~~. Inspections are optional when venting to the indoors. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.

Comment #5

Record Keeping Requirements - Condition D.1.8 - We request the D.1.8 (a) be changed to reflect weekly visible emission notations as discussed above. We also request clarification regarding D.1.8 (c) and its reference to redirecting the vents.

Response #5

In line with response to comment #4, Condition D.1.8 (c) is necessary to ensure proper record keeping when occasion arises for facilities to redirect venting. OAQ believes that monitoring and related record keeping and reporting requirements should ensure that all reasonable information is provided to evaluate continuous compliance with applicable requirements. Similarly, the Condition D.1.8(a) will not be revised as explained in Response #2 above. No changes have been made to Condition D.1.8 as a result of the comments.

Comment #6

Facility Operation Conditions - Section D.3 - We have permanently discontinued use of the soil extraction system as discussed above.

Response #6

Conditions D.3.1 and D.3.2 of Section D.3 have been revised as follows:

D.3.1 Volatile Organic Compounds (VOCs) [326 IAC 8-1-6]

Any change or modification which may increase potential VOC emissions to twenty-five (25) tons per year from the six (6) low-level air strippers ~~and the soil vapor extraction system~~ shall require prior approval from the Office of Air Quality (OAQ) before such change can occur. Therefore, the best available control technology (BACT) requirement in 326 IAC 8-1-6 (New Facilities: General Reduction Requirements) does not apply.

D.3.2 Hazardous Air Pollutants (HAPs) [326 IAC 2-4.1]

Any change or modification which may increase potential single HAP emissions to ten (10) tons per year, or total combined HAP emissions to twenty-five (25) tons per year, from the six (6) low-level air strippers ~~and the soil vapor extraction system~~ shall require prior approval from the Office of Air Quality (OAQ) before such change can occur. Therefore, the maximum achievable control technology (MACT) requirement in 326 IAC 2-4.1-1 (New Source Toxics Control) will not apply.

IDEM, OAQ will make the following change to Condition D.1.4 (a):

D.1.4 Visible Emissions Notations

(a) Visible emission notations of the Unit 2 (comprising of nine (9) auto mold plastic parts molding presses) baghouse stack exhaust shall be performed weekly during normal daylight operations ~~while combusting fuel oil~~. A trained employee shall record whether emissions are normal or abnormal.

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for
a Minor Source Operating Permit (MSOP)

Source Background and Description

Source Name:	**Johnson Controls, Inc.**
Source Location:	**1302 East Monroe Street, Goshen, Indiana 46528**
County:	**Elkhart**
SIC Code:	**3822**
Operation Permit No.:	**MSOP 039-17604-00018**
Permit Reviewer:	**Femi Ogunsola/ EVP**

The Office of Air Quality (OAQ) has reviewed a Minor Source Operating Permit (MSOP) application from Johnson Controls, Inc. relating to the operation of a source that manufactures controls for heating, refrigeration, air conditioning and pump devices.

History

On January 19, 1999, OAQ issued Johnson Controls, Inc. Part 70 Operating Permit No. 039-7201-00018 for its Goshen, Indiana heating, refrigeration, air conditioning and pump device manufacturing source. On December 10, 2001, the source submitted an application to OAQ requesting the existing Part 70 permit be amended to reflect the source's removal of their spray and powder painting facilities and removal of the pneumatic bead blasting machine. Such was approved as Administrative Amendment No. 039-12707 on January 27, 2002. On April 21, 2003, the source submitted an application for the renewal of their Part 70 Permit. This application indicates that five (5) auto mold plastic parts molding presses have been removed from the source. The removal of these facilities, and those removed facilities included in AA039-12707, has resulted in a reduction in the source-wide potential to emit regulated air pollutants below the Part 70 major source thresholds, as defined in 326 IAC 2-7-1(22). As such, and pursuant to 326 IAC 2-7-2 (Applicability), the Part 70 requirements no longer apply and this source is being issued a Minor Source Operating Permit (MSOP) pursuant to 326 IAC 2-6.1.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

(a) Two (2) Nissei plastic parts molding presses operating in a total enclosure, cumulatively identified as Unit #1, installed in 1994, with each press rated at a maximum throughput of 12.0 pounds of phenolic molding compound per hour.

(b) Nine (9) auto mold plastic parts molding presses cumulatively identified as Unit #2, all installed between 1959 and 1980, consisting of three (3) 75-ton presses each with a maximum throughput of 8.2 pounds of phenolic molding compound per hour and six (6) 25-ton presses each with a maximum capacity of 1.9 pounds of phenolic molding compound per hour, all exhausting to one (1) baghouse for particulate matter (PM) emissions control, with the baghouse exhausting at one (1) stack identified as S2.

(c) Two (2) natural gas fired boilers identified as Boiler 1 (Unit 9) and Boiler 2 (Unit 10) and individually rated at 11.7 (MMBtu) heat input per hour, with each boiler exhausting to one (1) stack respectively identified as S7 and S8. Boilers 1 and 2 were constructed in 1969 and 1977 respectively.

(d) Groundwater remediation system consisting of:

(1) Six (6) low-level air strippers, each rated at 200 gallons per hour and each equipped with an air blower operating at a maximum of 1400 actual cubic feet per minute (acfm), with emissions being exhausted to six (6) stacks designated AS1 through AS6; and

(2) One (1) flow distribution water tank, with pumps and associated equipment.

(e) Grinding Room rated at 12.5 pounds of plastic parts per hour and containing twenty-three (23) screw grinding machines, with a cartridge filter for particulate matter (PM) emissions control for the room.

(f) One (1) Wheelabrator-Frye Tumblast plastic parts deflashing machine identified as Unit #5, installed in 1978, rated at 400 pounds of plastic parts per hour, with one (1) baghouse for particulate matter (PM) emissions control, exhausting at one (1) stack identified as S5.

(g) One (1) spray can paint booth for touch-up of metal and maintenance of metal and plastic parts utilizing an average of one (1) 12-ounce spray can per week, and equipped with dry filter particulate matter overspray control.

(h) One (1) baking soda blaster, rated at 5 pounds of plastic parts and baking soda per hour, with a cartridge filter for particulate matter (PM) emission control.

(i) Additional miscellaneous activities, including:

(1) Two (2) hot water heaters rated at 0.65 MMBTU/hr.

(2) One (1) Clean-O-Mat aqueous washer.

(3) Two (2) Bowden aqueous washers.

(4) One (1) electric curing oven for plastic parts.

(5) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.

Previously Permitted Emission units and Pollution Control Equipment Removed from the Source

The following previously permitted facilities have been removed from the source and are not included in this approval:

(a) Three (3) 75-Ton Automold Presses; and

(b) Two (2) 25-Ton Automold Presses.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

New Emission Units and Pollution Control Equipment Receiving Advanced Source Modification Approval

There are no new facilities proposed at this source during this review process.

Existing Approvals

The source has constructed or has been operating under the following previous approvals:

(a) Part 70 Operating Permit No.: T039-7201-00018, issued on January 19, 1999;

(b) First Permit Modification: 039-10778-00018, issued on May 21, 1999;

(c) First Administrative Amendment : 039-11058-00018, issued on July 22, 1999;

(d) Second Administrative Amendment : 039-14268-00018, issued on May 4, 2001;

(e) Third Administrative Amendment: 039-12707-00018, issued on January 7, 2002; and

(f) First Permit Reopening: 039-13246-00018, issued January 29, 2002.

All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either incorporated as originally stated, revised, or deleted by this permit. All previous approvals are superseded by this permit.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the conversion of Part 70 Permit T039-7201-00018 to MSOP 039-17604-00018 be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on September 15, 2000. Additional information was received on October 2, 2003.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (six (6) pages).

Potential To Emit of Source Before Controls

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency.”

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	greater than 25, less than 100
PM-10	greater than 25, less than 100
SO_2	less than 25
VOC	less than 25
CO	less than 25
NO_x	less than 25

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential To Emit (tons/year)
Phenol	less than 10
trichloroethylene	less than 10
hexane	less than 10
Formaldehyde	less than 10
TOTAL	less than 25

(a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of the criteria pollutants are less than 100 tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.

(b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and/or the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.

(c) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM and PM10 are equal to or greater than 25 tons per year and less than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-6.1.

(d) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are not counted toward determination of PSD applicability.

County Attainment Status

The source is located in Elkhart County.

Pollutant	Status
PM-10	attainment
SO_2	attainment
NO_2	attainment
Ozone	maintenance
CO	attainment
Lead	attainment

(a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Elkhart County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of

Significant Deterioration (PSD), 326 IAC 2-2.

(b) Elkhart County has been classified as attainment or unclassifiable for the remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Source Status

Existing Source PSD Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	2.6
PM10	2.6
SO_2	0.0
VOC	46.5
CO	3.6
NO_x	14.4
Single HAP	13.9
Total HAPs	17.9

(a) This existing source is **not** a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not in one of the 28 listed source categories.

(b) The source has removed equipment from service as described herein and has opted to transition the current Part 70 permit T039-7201-00018, issued on January 19, 1999, to a Minor Source Operating Permit (MSOP). These emissions reflect the potential to emit after the transition, reflecting all limits, of the emission units (based on 8,760 hours of operation per year at rated capacity including enforceable emission control and production limit, where applicable).

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source was issued Part 70 (T039-7201-00018) on January 19, 1999. Equipment reviewed under the Part 70 permit has been removed from service as described herein. This existing source, including the emissions from the remaining equipment, is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

(a) each criteria pollutant is less than 100 tons per year,

(b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and

(c) any combination of HAPs is less than 25 tons/year.

This status is based on all the air approvals issued to the source. This status has been verified by the OAQ inspector assigned to the source.

Federal Rule Applicability

(a) 40 CFR Part 60, Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units)

Boiler 1 (Unit #9), constructed in 1969 and rated at 11.7 MMBtu per hour heat input, and Boiler 2 (Unit #10), constructed in 1977 and rated at 11.7 MMBtu per hour, are not subject

to the New Source Performance Standard, 326 IAC 12, (40 CFR Part 60.40c through 60.48c, Subpart Dc) because each facility was constructed prior to the rule applicability date of June 9, 1989.

There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) applicable to this source.

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 61) applicable to this source.

(c) (1) 40 CFR Part 63, Subpart T (National Emission Standards for Halogenated Solvent Cleaning)

Under Operation Permit 20-04-90-0640, issued November 11, 1986, this source was permitted to operate a conveyorized (in-line) cold cleaning trichloroethylene (TCE) degreaser with a cold ring and cover for VOC emissions control. This facility was removed from service during May 1998; therefore, the requirements of Subpart T do not apply.

(2) 40 CFR Part 63, Subpart OOO (National Emission Standards for Hazardous Air Pollutant Emissions: Manufacture of Amino/Phenolic Resins)

This source is not subject to the NESHAP for source categories, 326 IAC 20, (40 CFR 63, Subpart OOO), for the phenolic resin plastic parts making operations since the source is not a manufacturer of phenolic resin. Therefore this rule does not apply to the source.

(3) The United States Environmental Protection Agency (US EPA) has established the *Industrial, Commercial, and Institutional Boilers and Process Heaters* source category as requiring hazardous air pollutant control and has tentatively established February 28, 2004 as the final rule promulgation date. As discussed herein, this source has removed five (5) auto mold plastic parts molding presses (three (3) 75-ton and two (2) 25-ton presses) between June 1999 and December 2001. This has reduced the uncontrolled potential to emit a single and combined HAPs to below the respective major source thresholds of ten (10) and twenty five (25) tons per year. Since the units were removed prior to the compliance date for this yet to be promulgated rule, and this is not a major source of HAP emissions, the requirements of this rule will not apply to this source.

(d) The requirements of Section 112(j) of the Clean Air Act (40 CFR Part 63.50 through 63.56) are not applicable to this source because it is not a major source of hazardous air pollutant (HAP) emissions (i.e., the source does not have the potential to emit 10 tons per year or greater of a single HAP or 25 tons per year or greater of a combination of HAPs, after any enforceable controls and/or limitations).

(e) The requirements of 40 CFR Part 64, Compliance Assurance Monitoring, are not applicable to this source. Such requirements apply to a pollutant-specific emissions unit (PSEU), as defined in 40 CFR 64.1, at a major source that is required to obtain a Part 70 or 71 permit if the PSEU meets the following criteria:

(1) the unit is subject to an emission limitation or standard for an applicable regulated air pollutant,

(2) the unit uses a control device as defined in 40 CFR 64.1 to comply with that emission limitation or standard, and

(3) the unit has a potential to emit (PTE) before controls equal to or greater than 100 percent of the amount (tons per year) of the pollutant required for a source to be classified as a Part 70 major source.

This source is an MSOP source and is not a major Part 70 source. Therefore, the requirements of 40 CFR 64, Compliance Assurance Monitoring, are not applicable to this source.

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration, PSD)

Pursuant to 326 IAC 2-2 (PSD), this source originally constructed prior to the August 28, 1977 rule applicability date with modifications thereafter, is not considered a major source because it does not have the potential to emit 250 tons per year of any criteria pollutant and it is not one of the 28 listed source categories. Therefore, the Prevention of Significant Deterioration (PSD) rules, 326 IAC 2-2 do not apply.

326 IAC 2-4.1-1 (New Source Toxics Control)

Pursuant to 326 IAC 2-4.1-1 (New Source Toxics Control), any new process or production unit, which in and of itself emits or has the PTE 10 tons per year of any HAP or 25 tons per year of the combination of HAPs, and is constructed or reconstructed after July 27, 1997, must be controlled using technologies consistent with Maximum Achievable Control Technology (MACT). No facilities with an uncontrolled PTE of 10 tons per year of any single HAP and 25 tons per year of the combination of HAPs have been constructed or reconstructed since July 27, 1997. Therefore, the requirements of 326 IAC 2-4.1-1 (New Source Toxics Control) do not apply to this source.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it is located Elkhart County and it has the potential to emit more than ten (10) tons per year of VOC. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submission should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 6-4 (Fugitive Dust Emissions)

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

State Rule Applicability - Individual Facilities

326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating)

Boiler 1 (Unit 9), constructed in 1969 and rated at 11.7 MMBtu/hr heat input, and Boiler 2 (Unit 10), constructed in 1977 and rated at 11.7 MMBtu/hr heat input, are each subject to 326 IAC 6-2. Both indirect heating units fire only natural gas fuel. Pursuant to 326 IAC 6-2-1, indirect heating facilities not in a specified county and existing and operating prior to September 21, 1983, shall limit particulate matter (PM) emissions according to the equation at 326 IAC 6-2-3 as follows:

$$Pt = \frac{C \cdot a \cdot h}{76.5 \cdot Q^{0.75} \cdot N^{0.25}}$$

Where C = Maximum ground level concentration with respect to distance from the point source at the "critical" wind speed for level terrain. This shall equal 50 micrograms per cubic meter ($\mu g/m^3$) for a period not to exceed a sixty (60) minute time period.

Pt = Pounds of particulate matter emitted per million Btu heat input (lb/MMBtu).

Q = Total source maximum operating capacity rating in million Btu per hour (MMBtu/hr) heat input.

N = Number of stacks in fuel burning operation

a = Plume rise factor which is used to make allowance for less than theoretical plume rise. The value 0.67 shall be used for Q less than or equal to 1,000 MMBtu/hr heat input. The value 0.8 shall be used for Q greater than 1,000 MMBtu/hr heat input.

h = Stack height in feet.

For Boiler 1 (Unit #9), which was constructed in 1969:

$Pt = (50*0.67*30)/(76.5*11.7^{0.75} * 1^{0.25}) = 2.08$ lb/MMBtu

However, pursuant to 326 IAC 6-2-3(d), particulate emissions from all facilities used for indirect heating purposes which were existing and in operation on or before June 8, 1972, shall in no case exceed 0.8 lb/MMBtu heat input.

For Boiler 2 (Unit #10), which was constructed in 1977:

$Pt = (50*0.67*30)/(76.5*(11.7+11.7)^{0.75} * 2^{0.25}) = 1.04$ lb/MMBtu

However, pursuant to 326 IAC 6-2-3(e), particulate emissions from any facility used for indirect heating purposes which has 250 MMBtu/hr heat input or less and which began operation after June 8, 1972, shall in no case exceed 0.6 lb/MMBtu heat input.

Boiler 1 and 2 shall comply with their respective allowable PM emission limits (see Appendix A , page 4 of 6).

326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)

Pursuant to 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes), particulate emissions for the following facilities shall be limited as stated below.

(a) The two (2) Nissei plastic parts molding presses (Unit #1) operate in a total enclosure with no particulate emissions exhausting to the atmosphere and are not subject to this rule per 326 IAC 6-3-1(14).

(b) The spray can paint booth for touch-up and maintenance of metal and plastic parts is not subject to this rule per 326 IAC 6-3-1(12).

(c) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the Wheelabrator-Frye Tumblast plastic parts deflashing machine (Unit #5) shall not exceed 1.39 pounds per hour when operating at a process weight rate of 400 pounds per hour. The pounds per hour limitation was calculated using the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

Compliance with this limit is shown through calculation on page 6 of 6, TSD Appendix A. The baghouse shall be in operation at all times that Unit #5 is in operation in order to comply with this limit.

(d) Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour. This includes:

(1) Nine (9) auto mold plastic parts molding presses (cumulatively Unit #2);

(2) One (1) baking soda blaster, rated at 5 pounds of plastic parts and baking soda per hour, with a cartridge filter for particulate matter (PM) emissions control;

(3) Grinding Room rated at 12.5 pounds of plastic parts per hour and containing twenty-three (23) screw grinding machines, with cartridge filter type particulate matter (PM) emissions control for the room; and

(4) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment and welding equipment.

No compliance monitoring conditions will be inserted into the permit as the facilities in (1), (2) and (3) are equipped with a PM control device and do not have allowable emissions exceeding 10 pounds per hour, and the uncontrolled activities in (4) do not have actual emissions exceeding 25 tons per year. Therefore, there will be no compliance monitoring for these facilities.

326 IAC 8-1-6 (New Facilities; General VOC Reduction Requirements)

This rule applies to facilities located anywhere in the state that were constructed on or after January 1, 1980, which have a PTE of VOC at 25 tons per year or more, and which are not otherwise regulated by another provision of Article 8. The source has no other facilities that have a PTE of VOC at 25 tons per year or more. Therefore, the requirements of 326 IAC 8-1-6 are not applicable.

326 IAC 8-2-9 (Miscellaneous Metal Coating)

Pursuant to 326 IAC 8-2-1 (Applicability) and 326 IAC 8-2-9, facilities existing as of July 1, 1990 that are located in Elkhart County (as well as other specified counties), and with actual VOC emissions of greater than fifteen (15) pounds per day before add-on controls, shall limit the VOC content of the applied coating to 3.5 pounds of VOCs per gallon of coating less water, for air dried coatings. The spray can paint booth for touch-up and maintenance of metal and plastic parts has actual VOC emissions of less than 15 pounds per day. Therefore, the requirements of 326 IAC 8-2-9 do not apply to the facility and records will be kept to verify this status. No other coating facility

is used to coat metal parts at this source.

Conclusion

The operation of this source that manufactures control devices for heating, refrigeration, air conditioning and pump systems shall be subject to the conditions of the attached proposed **MSOP No. 039-17604-00018.**

Appendix A: Summary of Emission Calculations

Company Name: Johnson Controls, Inc.
Address City IN Zip: 1302 East Monroe Street, Goshen, IN 46528
MSOP: 039-17604
Plt ID: 039-00018
Reviewer: FO/EVP
Date: 08/20/2003

Uncontrolled Potential to Emit (tons/year)

Emissions Generating Activity								
Pollutant	Plastic Parts Molding Presses Two (2) Nissei	Plastic Parts Molding Presses Nine (9) Auto Mold	Natural Gas Firing at Boiler 1 & Boiler 2	Remediation (Air Stripping & Soil Vapor Extraction)	Plastic Parts Deflashing	Baking Soda Blaster	Screw Machine Grinding	**TOTAL**
PM	0.00	7.43	0.19	0.00	39.26	11.17	6.40	64.45
PM10	0.00	7.43	0.78	0.00	39.26	11.17	6.40	65.04
SO2	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.06
NOx	0.00	0.00	10.25	0.00	0.00	0.00	0.00	10.25
VOC	5.68	6.31	0.56	1.67	0.00	0.00	0.00	14.22
CO	0.00	0.00	8.61	0.00	0.00	0.00	0.00	8.61
total HAPs	5.57	6.31	0.19	1.63	0.00	0.00	0.00	13.70
worst case single HAP	4.52	4.73	0.19	1.45	0.00	0.00	0.00	9.25

Total emissions based on rated capacity at 8,760 hours/year.

Controlled Potential to Emit (tons/year)

Emissions Generating Activity								
Pollutant	Plastic Parts Molding Presses Two (2) Nissei	Plastic Parts Molding Presses Nine (9) Auto Mold	Natural Gas Firing at Boiler 1 & Boiler 2	Remediation (Air Stripping & Soil Vapor Extraction)	Plastic Parts Deflashing	Baking Soda Blaster	Screw Machine Grinding	**TOTAL**
PM	0.00	0.15	0.19	0.00	0.79	0.22	0.13	1.48
PM10	0.00	0.15	0.78	0.00	0.79	0.22	0.13	2.07
SO2	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.06
NOx	0.00	0.00	10.25	0.00	0.00	0.00	0.00	10.25
VOC	5.68	6.31	0.56	1.67	0.00	0.00	0.00	14.22
CO	0.00	0.00	8.61	0.00	0.00	0.00	0.00	8.61
total HAPs	5.57	6.31	0.19	1.63	0.00	0.00	0.00	13.70
worst case single HAP	4.52	4.73	0.19	1.45	0.00	0.00	0.00	9.25

Total emissions based on rated capacity at 8,760 hours/year, after control.

Appendix A: **Process Emission Calculations**
(Page 1 of 2)

Company Name: **Johnson Controls, Inc.**
Address City IN Zip: **1302 East Monroe Street, Goshen, IN 46528**
Title V: **039-17604**
Plt ID: **039-00018**
Reviewer: **FO/EVP**
Date: **08/20/2003**

Uncontrolled Potential to Emit

Plastic Parts Molding at Two (2) Nissei Molding Units (Unit#1):

The following calculations determine emissions from the two (2) molding units which are situated in a total enclosure. Each unit is rated at 12 pounds of phenolic molding per hour. Based on 8,760 hours per year of production and engineering judgement (mass balance):

VOC:	24 lb plastic pellets/hr (@ maximum	5.40% wt. VOC) x	8760 hr/yr /	2000 lb / ton =	**5.67648 tons/yr**
Phenol:	24 lb plastic pellets/hr (@ maximum	4.30% wt. phenol) x	8760 hr/yr /	2000 lb / ton =	**4.52016 tons/yr**
Formaldehyde:	24 lb plastic pellets/hr (@ maximum	1.00% wt. formaldehyde) x	8760 hr/yr /	2000 lb / ton =	**1.0512 tons/yr**

Plastic Parts Molding at Three (3) 75 Ton Auto Mold Presses and Six (6) 25 Ton Auto Mold Presses (Unit #2):

The following calculations determine emissions from the three (3) 75 ton auto mold presses with each unit rated at 8.2 pounds of phenolic molding compound per hour, and the six (6) 25 ton auto mold presses with each rated at 1.9 pounds of phenolic molding compound, based on 8,760 hours per year of production and engineering judgement (mass balance).

VOC:	36.0 lb plastic pellets/hr (@ maximum	4.00% wt. VOC) x	8760 hr/yr /	2000 lb / ton =	**6.3072 tons/yr**
Phenol:	36.0 lb plastic pellets/hr (@ maximum	3.00% wt. phenol) x	8760 hr/yr /	2000 lb / ton =	**4.7304 tons/yr**
Formaldehyde:	36.0 lb plastic pellets/hr (@ maximum	1.00% wt. formaldehyde) x	8760 hr/yr /	2000 lb / ton =	**1.5768 tons/yr**

PM/PM10: The Unit #2 baghouse collects an average of 10 gallons PM per week, based on an actual weekly operating schedule of 80 hours (2 shifts). At a control device efficiency of 98 percent, uncontrolled emissions are computed as follows:

10 gal PM collected at baghouse/week (actual) x 13.3 lb PM / gal / 0.98 x (wk/ 80 hrs) x 4.38 tons/yr / lb/hr = 7.430357 tons/yr

Wheelabrator Frye Tumblast Machine (Unit #5):

The following calculations determine emissions from the molded plastic parts deflashing machine which is rated at 400 pounds of plastic parts per hour. Based on a baghouse collection efficiency of 98%, an average of 732 pounds of PM collected per month, and actual unit operating hours and operating capacity of 2,000 hours per year and 50%, respectively:

PM/PM10: 732 lb PM/month / 0.98 x 8760/2000 (pot/act hrs) x 12 months/yr / 0.5 unit capacity / 2000 lb / ton = 39.2591 tons/yr

Baking Soda Blaster

The following calculations determine emissions from the baking soda blaster which is rated at 2.5 pounds of parts per hour and utilizes up to 2.5 pounds of baking soda per hour. Based on a cartridge filter collection efficiency of 98 percent, and an average of 50 pounds PM collected during a 5-day work week at 4 hours per day of actual unit operation:

PM/PM10: 50 lb PM / 20 hr / 0.98 x 8760 hr/yr / 2000 lb / ton = 11.17347 tons/yr

Grinding Room (23 Screw Machine Grinders)

The following calculations determine emissions from the grinding room which is rated at 12.5 pounds of parts per hour and typically utilizes 3 of the 23 total grinders for a total of 4 hours each work day (5 days per work week). Based on a cartridge filter collection efficiency of 98 percent, and an average of 15 pounds PM collected during an assumed short work month of 20 days:

PM/PM10: 15 lb PM / month / 3 grinders / 0.98 x month/20days * day/4hrs) 8760 hr/yr / 2000 lb / ton = 0.279337 tons/yr per grinder = 6.424745 tons/yr (23 grinders)

Controlled Potential to Emit and 326 IAC 6-3-2 Compliance Determination

The allowable PM emission rate pursuant to 326 IAC 6-3-2 for weight rates up to 60,000 lb/hr is determined using the following formula:

E = 4.1 * P^0.67 where: E = allowable PM emission rate (lb/hr)
P = process weight rate (tons/hr)

Plastic Parts Molding at three (3) 75 Ton Auto Mold Presses and Six (6) 25 Ton Auto Mold Presses (Unit #2):

This facility is controlled by a bag type dust collector; therefore, the potential controlled PM emissions are used to determine 326 IAC 6-3-2 compliance:

E = 4.1 * (64.4/2000)^0.67

E = 0.41025 lb PM/hr (allowable) ; however, since the process weight rate is less than 100 pounds per hour, the default allowable emission rate is:

E = 0.551 lb PM/hr (allowable)

Potential controlled PM:	7.43036	tons/yr * (1 -	0.98) =	0.148607	tons/yr / 4.38 =	0.033929	lb PM/hr (will comply)

Wheelabrator Frye Tumblast Machine (Unit #5):

This facility is controlled by a bag type dust collector; therefore, the potential controlled PM emissions are used to determine 326 IAC 6-3-2 compliance:

E = 4.1 * (400/2000)^0.67

E = 1.39468 lb PM/hr (allowable)

Potential controlled PM:	39.2591	tons/yr * (1 -	0.98) =	0.785182	tons/yr / 4.38 =	0.179265	lb PM/hr (will comply)

Baking Soda Blaster & Grinding Room (23 Screw Grinders):

These facilities are controlled by cartridge dust collectors; therefore, the potential controlled PM emissions are used to determine 326 IAC 6-3-2 compliance. Since each facility has a process weight rate of less than 100 pounds per hour, pursuant to 326 IAC 6-3-2 the default allowable PM emission rate is:

E = 0.551 lb PM/hr (allowable)

Potential controlled PM (blaster):	11.1735	tons/yr * (1 -	0.98) =	0.223469	tons/yr / 4.38 =	0.05102	lb PM/hr (will comply)
Potential controlled PM (total grinding in room):	6.42474	tons/yr * (1 -	0.98) =	0.128495	tons/yr / 4.38 =	0.029337	lb PM/hr (will comply)

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100

Company Name: **Johnson Controls, Inc.**
Address City IN Zip: **1302 East Monroe Street, Goshen, IN 46528**
MSOP: **039-17604**
Plt ID: **039-00020**
Reviewer: **FO/EVP**
Date: **08/20/2003**

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
23.4	204.98

Boiler 1 (Unit #9) =	11.7
Boiler 1 (Unit #10)	11.7
Total	23.4

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.19	0.78	0.06	10.25	0.56	8.61

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Small Industrial Boiler
HAPs Emissions

Company Name: **Johnson Controls, Inc.**
Address City IN Zip: **1302 East Monroe Street, Goshen, IN 46528**
Title V: **T039-17604**
Plt ID: **039-00018**
Reviewer: **FO/EVP**
Date: **08/20/2003**

HAPs - Organics

	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	2.152E-04	1.230E-04	7.687E-03	1.845E-01	3.485E-04

HAPs - Metals

	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	5.125E-05	1.127E-04	1.435E-04	3.895E-05	2.152E-04

Methodology is the same as page 4 .

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Appendix A: VOC and HAP Emission Calculations
Six (6) Low Level Air Strippers & Soil Vapor Extraction System
Company Name: Johnson Controls, Inc.
Address City IN Zip: 1302 East Monroe Street, Goshen, IN 46528
MSOP: T039-17604-00018
Reviewer: FO/EVP
Date: 08/20/2003

Potential to Emit for Soil Vapor Extraction (SVE) (tons per year):

Contaminant	Concentration in Soil (ug/kg)	Area of SVE Influence (ft^2)	Depth of SVE Influence (ft)	Impacted Soil Volume (ft^3)	Soil Density (lb/ft^3)	Impacted Soil Mass (lbs)	Impacted Soil Mass (kg)	Pollutant Mass (mg)	Pollutant Mass (lbs)	Emission* Rate (tons)
cis-1,2-dichloroethene (VOC)	7137	4290	10	42900	110	4719000	2140524.358	15276922	33.679503	0.017
1,1,1-trichloroethane (VOC & HAP)	394	4290	10	42900	110	4719000	2140524.358	843366.6	1.859286	0.001
trichloroethene (VOC & HAP)	60268	4290	10	42900	110	4719000	2140524.358	129005122	284.404692	0.142
toluene (VOC & HAP)	659	4290	10	42900	110	4719000	2140524.358	1410605.6	3.109821	0.002
tetrachloroethene (VOC & HAP)	5859	4290	10	42900	110	4719000	2140524.358	12541332	27.648621	0.014
ethylbenzene (VOC & HAP)	382	4290	10	42900	110	4719000	2140524.358	817680.3	1.802658	0.001
xylenes (VOC & HAP)	2573	4290	10	42900	110	4719000	2140524.358	5507569.2	12.141987	0.006
									Total PTE VOC (tons/year) =	**0.182**
									Total PTE HAPs (tons/year) =	**0.165**

Note:
* Reflects total tons of pollutant to be emitted, based on pilot and soil testing and assuming all VOC and HAPs in the soil are emitted during one calendar year.

Potential to Emit for Six (6) Low Level Air Strippers (tons per year)

Contaminant	Maximum Concentration (ug/l)	Maximum Water Flow Rate (gpm)	Maximum Water Flow Rate (l/min)	Maximum Emission Rate (ug/min)	Maximum Emission Rate (lb/hr)	Maximum * Emission Rate (tons/yr)
trans-1,2-dichloroethene (VOC)	9	1140	4315.2762	38837.4858	0.005137423	0.023
trichloroethene (VOC & HAP)	580	1140	4315.2762	2502860.196	0.331078347	1.450
vinyl chloride (VOC & HAP)	4	1140	4315.2762	17261.1048	0.002283299	0.010
					Total PTE VOC (tons/year) =	**1.483**
					Total PTE HAPs (tons/year) =	**1.460**

* Based on maximum concentrations for calendar year 2000, determined through laboratory analysis of wastewater.